I. INTRODUCTION

[New Language, page PW-22]

The purpose of the Potable Water Sub-Element is to provide for the health and safety of the residents of Collier County by ensuring adequate potable water supply and distribution facilities that are cost-effective and environmentally sound. Such facilities may be provided through the Collier County Water-Sewer District, private utilities, other public utilities that operate within portions of the unincorporated County, or (in certain areas) private supply wells. In addition to the supply and distribution of potable water for residential and commercial purposes, the Potable Water Sub-Element also contains provisions related to establishment of new potable water sources, water conservation, and irrigation.

Goal, Objectives and Policies Potable Water Sub-Element

GOAL I: [Number Removed, page PW-23]

OBJECTIVE 1.1:

[Renumbered, revised text, page PW-23]

The County shall locate and develop potable water supply sources to meet the future needs of the County owned and operated systems, said supply sources meeting the minimum Level of Service Standards established by this Plan. The development and utilization of new potable water supply sources shall be based upon the information, guidelines and procedures identified within the County's Ten-Year Water Supply Facilities Work Plan (as updated annually), the Collier County Water-Sewer Master Plan, and the Lower West Coast Water Supply Plan prepared by the South Florida Water Management District.

Policy 1.1.1:

[Renumbered, revised text, page PW-23]

<u>The County shall Ccontinue</u> to expand the ASR (Aquifer Storage and Recovery) system as a potential emergency and seasonal potable water source.

Policy 1.1.2:

[Renumbered, revised text, page PW-23]

<u>The County shall Cc</u>ontinue to implement a program for the protection of existing and potential potable water supply sources.

Policy 1.1.3:

[Renumbered, revised text, page PW-23]

The County shall continue to Identify sufficient quantities of water sources to meet the County's estimated growth-related needs. Potential water sources could include any and/or all of those potential sources identified within the County's Ten-Year Water Supply Facilities Work Plan, the Collier County Water-Sewer Master Plan, and the Lower West Coast Water Supply Plan prepared by the South Florida Water Management District.

Policy 1.4:

[New text, page 23]

The County will coordinate with the South Florida Water Management District and other regulatory agencies in implementing effective linkages between growth management and water planning.

Policy 1.5:

[New text, page 23]

The County will coordinate with the South Florida Water Management District in the development of the Water Master Plan Update, which is the primary planning document for the Collier County Water-Sewer District.

Policy 1.6:

[New text, page 23]

The County will coordinate with the South Florida Water Management District to produce future plans for water supply as described within the Water Master Plan Updates that ensure the County's ability to maintain its stated Level of Service standard.

Policy 1.7:

[New text, page 23]

The County will reference the water supply guidelines of the most current version of the South Florida Water Management District's Lower West Coast Water Supply Plan in developing any future required Water Supply Facilities Work Plan.

OBJECTIVE 1.2:

[Renumbered, revised text, page PW-23]

The County will shall implement the following policies to make certain that public and private sector potable water service utilities provide, repair and/or replace potable water supply, treatment and distribution facilities to correct existing deficiencies in their respective service areas as may be required to meet or exceed the Level of Service Standards established in this Plan. In addition, public sector potable water service utilities will shall be expanded as necessary to provide for future growth, as provided for in the following policies.

Policy 1.2.1:

[Renumbered, revised text, page PW-23]

<u>The Collier County Water-Sewer District shall Cc</u>ontinue the development of a Collier County Regional Potable Water System consistent with the Capital Improvement Element and the <u>Collier County Water-Sewer</u> Water Master Plan Update to correct existing deficiencies and provide for future growth.

Policy 1.2.2:

[Renumbered, revised text, page PW-23, PW-24]

Consistent with the urban growth policies of the Future Land Use Element of this Plan, provision of central potable water service by the County is limited to the service areas shown in this Plan and depicted on the Collier County Water District Boundaries map

(Figure PW-1); the Existing and Future Potable Water Service Areas map (Figure PW-2), which includes the Rural Transition Water and Sewer District; within the Rural Transition Water and Sewer District – Mirasol map (Figure PW-2.1); and, to areas where the County has legal commitments to provide facilities and services as of the date of adoption of this Plan. Additionally, the County may serve Towns, Villages, Hamlets, and Compact Rural Developments within the Rural Lands Stewardship Area Overlay may be served by the County, at the County's discretion; presently, the County has no plans to serve any portion of the Rural Lands Stewardship Area Overlay. This Overlay is depicted on the countywide Future Land Use Map and map series.

Within the Rural Lands Stewardship Area Overlay: Hamlets and those Compact Rural Developments one hundred (100) acres or less in size may be served by central potable water facilities; Towns, Villages, and those Compact Rural Developments greater than one hundred (100) acres in size are required to be served by central potable water facilities; and, Compact Rural Developments one hundred (100) acres or less in size may be required to be served by central potable water facilities, depending upon the permitted uses within the Compact Rural Development. These facilities may be provided by the private sector, an independent water authority, or some other non-County utility provided.

For the purposes of this policy and policies 1-2.4, 1-5.1, and 1-5.3, within the Rural Lands Stewardship Area Overlay, the term "central potable water facilities" includes decentralized community treatment systems; and,. Innovative alternative water treatment systems such as decentralized community treatment systems shall not be prohibited by this policy provided that they meet all applicable regulatory criteria.

Policy 1.2.3:

[Renumbered, revised text, page PW-24]

By the time mandated for the adoption of land development regulations pursuant to Chapter 163,3202, F.S., including any amendments thereto, require to the extent of the County's authority private sector potable water service utilities, establish and file with the County a statement of their policy and criteria, consistent with the goals, objectives and policies of this Plan for the expansion, replacement, and/or repair of their facilities to correct existing deficiencies and provide for future growth within their respective service areas. The Collier County Water and Wastewater Authority (Authority), established by County Ordinance Number 96-6, regulates the operations of private sector potable water treatment utilities that provide potable water supply services to portions of unincorporated Collier County. All such private sector potable water supply service providers are required to meet the County's adopted potable water treatment Level Of Service (LOS). All private sector potable water supply service providers shall file an annual statement with the Authority that provides current operating information regarding the private sector service provider, including, but not limited to: a statement of current policies and service criteria, the LOS maintained by the service provider and whether such level of service meets the County's LOS Standard for potable water treatment. The annual report shall also document any necessary or projected facility expansion and/or replacement projects that are required to correct observed deficiencies.

Policy 1.2.4: [Renumbered, revised text, pages PW-24, PW-25]

Collier County shall Ppermit development of potable water supply systems as follows: within the Designated Urban Areas of the Plan, including the outlying urban areas of Immokalee, Copeland, Chokoloskee, Plantation Island, and Port of the Islands; within the areas depicted on the Collier County Water District Boundaries map (Figure PW-1); within the Existing and Future Potable Water Service Areas map (Figure PW-2), which includes the Rural Transition Water and Sewer District; within the Rural Transition Water and Sewer District – Mirasol map (Figure PW-2.1); in Sending Lands within the Rural Fringe Mixed Use District when Density Blending, as provided for in the Density Rating System of the Future Land Use Element, is utilized; in Towns, Villages, Hamlets and Compact Rural Developments within the Rural Lands Stewardship Area Overlay; and, in areas where the County has legal commitments to provide facilities and services as of the date of adoption of this Plan. For lands located within an area to receive County water service the Collier County Water-Sewer District, but in which County water service is not currently available, non-County potable water supply systems shall only be allowed on an interim basis until County service is available.

Individual potable water supply wells may be permitted within the areas depicted on the Collier County Water District Boundaries map (Figure PW-1) on an interim basis until County water service is available; individual potable water supply wells may be permitted in all Urban designated areas outside of the areas depicted on Figure PW-1 on an interim basis until a centralized potable water supply system is available; findividual potable water supply wells may be permitted in the Rural Transition Water and Sewer District, depicted on the Existing and Future Potable Water Service Areas map (Figure PW-2), on an interim basis until County water service is available; individual potable water supply wells may be permitted in Sending Lands within the Rural Fringe Mixed Use District when Density Blending, as provided for in the Density Rating System of the Future Land Use Element, is utilized, on an interim basis until County water service is available; and, individual potable water supply wells may be permitted on lands outside of the Urban designated areas, outside of areas depicted on Figure PW-1, and outside of Towns, Villages and those Compact Rural Developments greater then one hundred (100) acres in size within the Rural Lands Stewardship Area Overlay – all areas where potable water supply systems are not anticipated. However, individual potable water supply wells may or may not be permitted within Compact Rural Developments one hundred (100) acres or less in size, depending upon the uses permitted within the Compact Rural Development. Also, in Towns, Villages, and those Compact Rural Developments greater than one hundred (100) acres in size, potable water supply wells are allowed to serve no more than 100 acres, on an interim basis only, until central service is available.

Policy 1.2.5:

[Renumbered, revised text, page PW-25]

The County shall Ccontinue enforcement of ordinances requiring connection of existing and new development to central potable water systems when they become available.

Connections to a central system shall be made pursuant to Collier County Ordinance 01-73, adopted December 11, 2001.

Policy 1.2.6:

[Renumbered, revised text, page PW-25]

Where Community Development Districts, or other similar special districts are established to provide a tool for developers to finance infrastructure or other purposes, wholly or partially within the Collier County Water-Sewer District, water service shall be connected to the regional system, and internal facilities shall be conveyed, when acceptable, to the Collier County Water-Sewer District for operation and ownership in accordance with Collier County Ordinance 01-57, adopted October 23, 2001, or its latest revision, and District construction and operating policies.

OBJECTIVE 1.3:

[Renumbered, revised text, page PW-25]

LEVEL OF SERVICE

By the time mandated for the adoption of land development regulations Ppursuant to Chapter 163.3202, F.S., including any amendments thereto, Collier County has implemented procedures to ensure that at the time a development order is issued, potable water facility capacity that meets or exceeds the minimum Level of Service Standards established herein is available or will be available to serve the development under the guidelines established for concurrency in the Capital Improvement Element of this Plan.

Policy 1.3.1: [Renumbered, revised text, pages PW-25, PW-26, PW-27, PW-28]

The following Level of Service Standards are hereby adopted and shall be used as the basis for determining the availability of facility capacity and the demand generated by a development:

Review of water usage data indicates the LOS standard for finished water should remain at 185 gpcd. Review of the historical ratio of residential to non-residential demand indicated that approximately 17% of the total water usage is non-residential. Thus the residential demand is 154 gcpd and the total finished water demand is 185 gpcd.

LEVEL OF SERVICE FACILITY CAPACITY

FACILITY/SERVICE AREA

FACILITI/SERVICE AREA	LEVEL OF SERVICE
COLLIER COUNTY FACILITIES	STANDARD
Collier County Water/and Sewer District	185 gpcd
Goodland Water District	185 gpcd
Marco Island Water District	
Unincorporated Service Area (Marco Shores)	185 gpcd
CITY OF NAPLES FACILITIES	
Unincorporated Service Area	185gpcd
EVERGLADES CITY FACILITIES	
Unincorporated Service Area	185 gpcd

INDEPENDENT DISTRICTS/PRIVATE SECTOR SYSTEMS

Orangetree Utilities	<u>100gpcd</u>
Immokalee Water and Sewer District	<u>100gpcd</u>
Florida Governmental Utilities Authority	100gpcd

The standard hereby adopted is the following "wastewater" flow design standards, unless otherwise approved by the Board of County Commissioners to address economic, social and construction method variations between individual systems. (Source: Chapter 10D-6, Florida Administrative Code)

TYPE OF ESTABLISHMENT

GALLONS PER DAY (GPD)

Commercial

Airports	
a. <u>Pper passenger</u>	5
b. <u>Aadd per employee</u>	20
Barber and Beauty Shops (per chair)	100
Bowling Alleys (toilet wastes only per lane)	100
Country Club	
a. <u>Pper resident member</u>	100
b. Pper member present	25
c. <u>P</u> per employee	20
Dentist Offices	
a. Pper wet chair	200
b. <u>Pper non-wet chair</u>	50
Doctors Offices (per doctor)	250
Factories, exclusive of industrial wastes	
(gallons per person per shift)	
a. Nno showers provided	20
b. <u>S</u> showers provided	35
Food Service Operations	
a. Ordinary Restaurant (per seat)	50
b. 24 hour Restaurant (per seat)	75
c. Single Service articles only (per person)	25
d. Bar and Cocktail Lounge (per person)	30
e. Drive in Restaurant (per car space)	50
f. Carry Out only	
— i. Pper 100 square feet of floor space	50
— ii. <u>A</u> add per employee	20
g. Institutions (per meal)	5
Hotels and Motels	
a. Regular (per room)	150

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b. Resort Hotels, Camps, Cottages (per person)	75
c. Aadd for establishments with self service	400
laundry facilities (per machine)	
Office Building (per employee per 8 hour shift)	20
Service Stations (per water closet and per	250
urinal)	
Shopping Centers without food or laundry (per	0.1
square foot of floor space)	
Stadiums, Race Tracks, Ball Parks (per seat)	5
Stores per square foot of floor space	0.1
Swimming and Bathing Facilities, public (per	10
person)	
Theaters -	
a. <u>Iindoor, Auditoriums (per seat)</u>	5
b. Outdoor, Drive ins (per space)	10
Trailer/Mobile Home Park (per trailer space)	200
Travel Trailer/Recreational Vehicle Park	
a. Travel Trailer (overnight), without water and	75
sewer hookup (per trailer space)	
b. Travel Trailer (overnight), with water and	100
sewer hook-ups (per trailer space).	
INSTITUTIONAL	
Churches (per seat)	3
Hospitals (per bed) (does not include kitchen	20
wastewater flows)	
Nursing, Rest Homes (per bed) (does not	100
include kitchen wastewater flows)	
Parks, Public Picnic	
a. Wwith toilets only (per person)	<u>5</u>
b. Wwith bathhouse, showers and toilets (per	10
person)	
Public Institutions other than Schools &	100
Hospitals (per person)	100
Schools (per student)	
a. <u>D</u> day type	15
b. Aadd for showers	5
c. Aadd for cafeteria	5
d. Aadd for day school workers	15
e. <u>B</u> boarding type	75
Work/Construction Camps Semi-permanent	50
(per worker)	30
RESIDENTIAL	
Residences	
a. Single or multiple family (per dwelling unit)	150
1 bedroom and 600 square feet or less heated	130
or cooled area bedrooms	
or cooled area ocurooms	

Aand 601 - 1000 square feet heated or cooled	300
area	
3 bedrooms and 1001 2000 square feet heated	4 50
or cooled area	
4 or more bedrooms and more than 2000	600
square feet heated or cooled area	
b. Other (per occupant)	75

FOOTNOTES:

- 1. For food service operations, kitchen wastewater flows shall normally be calculated as sixty-six percent (66%) of the total establishment wastewater flow.
- 2. Systems serving high volume establishments, such as fast food restaurants and service stations located near interstate type highways, require special sizing considerations due to above average sewage volume expected from restroom facilities.

Policy 1.3.2:

[Renumbered, revised text, page PW-28]

In order to ensure that these Level of Service Standards <u>contained in Policy 3.1</u> are maintained, methodologies for determining available capacity and demand shall incorporate appropriate peak demand coefficients for each facility and for the type of development proposed.

Policy 1.3.3:

[Renumbered, revised text, page PW-28]

These Level of Service Standards <u>contained in Policy 3.1</u> are the minimum criteria for replacement, expansion or increase in capacity of potable water supply facilities.

Policy 1.3.4:

[Renumbered, revised text, page PW-28]

The County will aAnnually review historical potable water demand records and adjust these Level of Service Standards contained in Policy 3.1 if so indicated by said the annual review.

OBJECTIVE 1.4:

[Renumbered, revised text, page PW-28]

The County will shall continue to promote conservation of potable water supplies by developing and implementing an integrated, comprehensive conservation strategy which will identify specific consumption per capita goals.

Policy 1.4.1:

[Renumbered, revised text, page PW-28]

<u>The County shall Nnegotiate</u> agreements with area golf courses to accept and use treated wastewater effluent for irrigation when and where <u>such treated effluent</u> same is available from existing and future wastewater treatment plants.

Policy 1.4.2:

[Renumbered, revised text, page PW-28]

<u>The County shall Ccontinue</u> to connect existing and future publicly owned lands suitable for irrigation with treated wastewater effluent, such as government building grounds, parks, and highway medians when economically feasible.

Policy 1.4.3:

[Renumbered, revised text, page PW-28]

<u>The County shall Continue</u> to connect existing and future privately owned lands suitable for irrigation with treated wastewater effluent, such as cemeteries, nurseries and commercial/industrial parks when economically feasible.

Policy 1.4.4:

[Renumbered, revised text, page PW-28]

<u>The County shall Ppromote</u> the use of xeriscape techniques (drought resistant landscaping) to minimize potable water use for landscaping irrigation, as described in <u>Division 2.4 Section 4.06.01 A.1.h.</u> of the Collier County Land Development Code.

Policy 1.4.5:

[Renumbered, revised text, page PW-29]

<u>The County shall</u> <u>Ppromote</u> and enforce the Water Irrigation Ordinance for Collier County, Ordinance <u>Number</u> 02-17, adopted April 9, 2002, to reduce potable water use for irrigation.

Policy 1.4.6:

[Renumbered, revised text, page PW-29]

At such time as excess effluent is available, the County shall permit construction and connection of dual water systems to the County's effluent transmission system (i.e., separate potable water and treated wastewater effluent) in new subdivisions when the construction and or connection of a dual water system will not negatively impact the potable water system's regulatory compliance or operation.

Policy 1.4.7 Deleted

[Deleted text, page PW-29]

OBJECTIVE 1.5:

[Renumbered, revised text, page PW-29]

The County will discourage urban sprawl and the proliferation of private sector potable water service suppliers in an effort to maximize the use of existing public facilities through the development order approval process by implementing the following policies.

Policy 1.5.1:

[Renumbered, revised text, page PW-29]

The County will discourage urban sprawl by permitting universal availability of central potable water systems only: in the Designated Urban Area, in Receiving and certain Neutral Lands within the Rural Fringe Mixed Use District, in the Designated Urban-Rural Fringe Transition Zone Overlay, and in the Rural Settlement District, all of which are depicted on the Future Land Use Map, and in Towns, Villages, Hamlets and Compact Rural Developments within the Rural Lands Stewardship Area Overlay. These areas are further identified as: within the Collier County Water District Boundaries on Figure PW-1 of the Potable Water Sub-element, except the outlying urban areas of Immokalee, Copeland, Chokoloskee, Plantation Island, and Port of the Islands; or within the Rural Transition Water and Sewer District Boundaries on Figure PW-2 of the Potable Water Sub-element; or in Sending Lands within the Rural Fringe Mixed Use District when Density Blending, as provided for in the Density Rating System of the Future Land Use Element, is utilized; within the Rural Lands Stewardship Area Overlay, as each Town, Village, Hamlet, and Compact Rural Development is designated; and, in areas where the County has legal commitments to provide facilities and service outside the Urban Area as of the date of adoption of this Plan.

Policy 1.5.2:

[Renumbered, revised text, page PW-29]

The County will discourage urban sprawl and the proliferation of private sector and/or package potable water treatment systems through the development order approval process to ensure maximum utilization of the existing and planned public facilities. No existing private sector or potable water treatment systems will shall be permitted to add customers unless all Levels of Service Standards are met, and operations are in conformance with all FDEP permits.

Policy 1.5.3:

[Renumbered, revised text, page PW-30]

As provided for in the Rural Lands Stewardship Area Overlay, and in Policies 4-2.2 and 4-2.4 of this Sub-Element, central potable water systems are permitted in Towns, Villages, Hamlets, and Compact Rural Developments. Though not anticipated, it is possible that central potable water system distribution lines may extend through lands not designated as a Town, Village, Hamlet or Compact Rural Development; in such instance no properties designated other than as a Town, Village, Hamlet or Compact Rural Development is are permitted to connect to these distribution lines.

Policy 1.5.4:

[Renumbered, revised text, page PW-30]

[Adopted as Policy 1.5.3 (now 5.3) but re-numbered since the above Policy 1.5.3 (now 5.3) became effective first.]

Under criteria, projects may be eligible for central potable water service from Collier County Utilities, or a private sector/independent district, within the Rural Transition Water and Sewer District, depicted on the Existing and Future Potable Water Service Areas map (Figure PW-2) of the this Potable Water Sub-element, subject to availability.

Qualifying criteria will shall be limited to the requirements and incentives established in the Future Land Use and the Conservation and Coastal Management Elements of the this Plan to obtain preservation standards established for environmentally sensitive lands in the Sending Areas Lands of the Rural Fringe Mixed Use District (RFMUD). Criteria for potable water service eligibility may include, but are not limited to, plans for development, which utilize creative planning techniques such as clustering, density blending, rural villages, and transfer of development rights (TDRs) from identified environmentally sensitive areas RFMUD Sending Lands. Criteria for eligibility may be amended and additional Sending and Receiving Lands may be designated in the future. Central Potable Water distribution lines, within the Rural Transition Water and Sewer District, may extend through Sending Lands; however, no properties designated as Sending Lands may are permitted to connect to the distribution lines.

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